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Peter Besen

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7590 08/04/2009  
Christopher C. Winslade  
McAndrews, Held & Malloy  
Suite 3400  
500 W. Madison Street  
Chicago, IL 60661

EXAMINER

ROBERTS, JESSICA M

ART UNIT

PAPER NUMBER

2621

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/726,814	<b>Applicant(s)</b> BESEN ET AL.	
	<b>Examiner</b> JESSICA ROBERTS	<b>Art Unit</b> 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05/18/2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claim 1-15 have been considered but are moot in view of the new ground(s) of rejection.

### ***Acknowledgement of Amendment***

Applicant's amendment filed 05/18/2009 overcomes the following objection(s)/rejection(s):

The rejection of claims 1-10 has been withdrawn in view of Applicant's amendment.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-3, 5, 7-9, 11-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vince et al., US-6,765,966 in view of Applicant's Admitted Prior Art (AAPA) and further in view of Hughes et al., US-2001/0038746 A1.

Regarding claim 1, Vince teaches A method for producing a high definition video signal comprising: performing by at least one circuit (col. 4 line 25-29) demuxing a high definition program stream into at least one high definition video data stream component (The invention provides methods and apparatus for re-encoding a high definition television signal into a standard definition television signal as shown in FIG. 1. In a preferred embodiment of the invention, an incoming television signal 100 is demodulated at a demodulator 20 of a partial re-encoding transcoder generally designated 10. The demodulated signal is split at a splitter 30 into a first signal 32 and a second signal 34, the first signal 32 being substantially identical to the second signal 34. A decoder 40 determines whether the second signal 34 is an HD signal and in the event that it is an HD signal, decodes it. The decoded HD signal is re-scaled at a re-scaler 50 into SD signal format. The re-scaled HD signal is re-encoded at an encoder 60 as an SD signal. A multiplexer 70 multiplexes the re-scaled and re-encoded second signal 34' with the first signal 32 to create a multiplexed signal 75 having two versions of the original signal 100, such that when the incoming television signal 100 is an HD signal, the multiplexed signal 75 will contain an HD version and an SD version of the incoming television signal 10, col. 2 line 60 to col. 3 line 13. Further disclosed by Vince is where the second signal 34 is an SD signal, col. 3 line 32-33) and a plurality of companion component data streams (in an alternate embodiment the protocol data may be extracted from at least one of the first signal and the second signal (e.g., by a processor in conjunction with the splitter), col. 2 line 19-21); muxing the plurality of companion

component data streams with a standard resolution video stream into a standard definition video program stream (A multiplexer 70 multiplexes the re-scaled and re-encoded second signal 34' with the first signal 32 to create a multiplexed signal 75 having two versions of the original signal 100, such that when the incoming television signal 100 is an HD signal, the multiplexed signal 75 will contain an HD version and an SD version of the incoming television signal 100, col. 6-12. Further disclosed, the redefined protocol data (indicated at 84) may then be inserted into the multiplexed data stream at the multiplexer, col. 3 line 24-26 and fig. 1 element 84, 70. Therefore, it is clear to the Examiner that Vince discloses to multiplex the protocol data with the multiplex HD and SD signals, which reads upon the claimed limitation); scaling the standard definition video stream to a resolution consistent with the high definition video data stream (fig. 1 element 50). Vince is silent in regards to demuxing the standard definition program stream into a standard definition stream and a sub-picture data stream; overlaying the scaled standard definition video stream with the demuxed subpicture data stream; and replacing the standard definition video stream with the at least one high definition video data stream to produce a high definition video data signal.

However, AAPA teaches demuxing the standard definition program stream into a standard definition stream (fig. 2), and a sub-picture data stream (fig. 2 element 208) overlaying the standard definition video stream with the demuxed subpicture data stream (fig. 2 element 212). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of AAPA with for

providing Vince to adequately combine various program stream that compose a standard definition stream into a signal.

Vince (modified by AAPA) is silent in regards to replacing the standard definition video stream with the at least one high definition video data stream to produce a high definition video data signal.

However, Hughes teaches replacing the standard definition video stream with the at least one high definition video data stream to produce a high definition video data signal (fig. 5).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the teachings of Hughes with Vince (modified by AAPA) for providing improved image processing.

Regarding claim 2, Vince (modified by AAPA and Hughes) as a whole teaches everything as claimed above, see claim 1. In addition, Vince teaches the method of claim 1 further including, prior demuxing the high definition program stream (fig. 1 element 30), and receiving a program data stream (fig. 1 element 100, incoming television signal).

Regarding claim 3, Vince modified by AAPA and Hughes) as a whole teaches everything as claimed above, see claim 2. In addition, Vince teaches the method of claim 2 further including determining if the received program data stream is a high definition program data stream (col. 1 line 52-55).

Regarding claim 5, Vince (modified by AAPA and Hughes) as a whole teaches everything as claimed above, see claim 1. In addition Vince teaches the method of claim 1 wherein the high definition program stream is in encrypted format (A multiplexer 70 multiplexes the re-scaled and re-encoded second signal 34' with the first version of the original signal 100, such that when incoming television signal is an HD signal, the multiplexed signal 75 will contain an HD version and an SD version of the incoming television signal, col. 3 line 6-12. Further disclosed by Vince is that in an alternate embodiment, the multiplexed signal may be encrypted by an optional encryption device 90, col. 3 line 63-63 and fig. 1 element 90. Therefore, it is clear to the Examiner that Vince discloses to encrypt the multiplexed signal that contains both the SD and HD signals, which read upon the claimed limitation).

Regarding claim ,7 Vince (modified by AAPA and Hughes) as a whole teaches everything as claimed above, see claim 1. In addition, Vince teaches the method of claim 1 wherein the at least one high definition video data stream component is in compressed format (the re-scaled HD signal is re-encoded at an encoder as an SD signal, col. 2 line 8-9).

Regarding claim 8, Vince (modified by AAPA and Hughes) as a whole teaches everything as claimed above, see claim 7. In addition, Vince teaches the method of claim 7 further comprising, prior to the replacing step, decompressing the high definition video data stream (fig. 1 element 40).

Regarding claim 9, Vince (modified by AAPA and Hughes) as a whole teaches everything as claimed above, see claim 1. In addition, Vince teaches the method of claim 1 further comprising generating the standard resolution video stream (col. 1 line 52-55).

Regarding claim 11, which is substantially the same as claim 1, in addition to an encrypter for creating a high definition video data signal from the high definition video data stream and the set of other component data streams, thus the rejection made for claim 1 applies here for common subject matter. Vince teaches an encrypter (fig. 1 element 90) for creating a high definition video data signal from the high definition video data stream and the set of other component data streams (A multiplexer 70 multiplexes the re-scaled and re-encoded second signal 34' with the first version of the original signal 100, such that when incoming television signal is an HD signal, the multiplexed signal 75 will contain an HD version and an SD version of the incoming television signal, col. 3 line 6-12. Further disclosed by Vince is that in an alternate embodiment, the multiplexed signal may be encrypted by an optional encryption device 90, col. 3 line 63-63 and fig. 1 element 90. Therefore, it is clear to the Examiner that Vince discloses to encrypt the multiplexed signal containing the HD signal).

Regarding claim 12, Vince (modified by AAPA and Hughes) as a whole teaches everything as claimed above, see claim 11. Vince is silent in regards to the apparatus of



claim 11 further including a receiver for receiving a program data stream.

However, Hughes teaches the apparatus of claim 11 further including a receiver for receiving a program data stream (storage medium, DVD, fig. 1).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the teachings of Hughes with Vince (modified by AAPA) for providing improved image processing.

Regarding claim 13, Vince (modified by AAPA and Hughes) as a whole teaches everything as claimed above see claim 12. In addition, Vince teaches wherein the received program data stream is in encrypted format (Vince discloses where in an alternate embodiment, the multiplexed signal may be encrypted by an optional encryption device, col. 3 line 62-63).

Regarding claim 15, Vince (modified by AAPA and Hughes) as a whole teaches everything as claimed above, see claim 12. In addition, Vince teaches the apparatus of claim 12 further including a router (fig. 1 element 20) for determining if the received program data stream is a high definition program stream (col. 1 line 52-55).

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vince et al., US-6,765,966 in view of Applicants Admitted Prior Art (AAPA) in view of Hughes et al., US-2001/0038746 A1 and further in view of Garrido et al., US-2004/0022318.

Regarding claim 4, Vince (modified by AAPA and Hughes) as a whole teaches everything as claimed above, see claim 1. Vince is silent in regards to the method of claim 1 wherein the plurality of companion component data streams comprises one or more of audio data stream, a subpicture data stream, and a navigational data stream.

However, Garrido teaches wherein the plurality of companion component data streams comprises one or more of audio data stream, a subpicture data stream, and a navigational data stream ([0013]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Garrido with Vince (modified by AAPA and Hughes) to allow for SDTV signals to fit on HDTV displays [0050].

6. Claim 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vince et al., US-6,765,966 in view of Applicants Admitted Prior Art (AAPA) in view of Hughes et al., US-2001/0038746 A1 and further in view of Mercier et al., US-2005/0114909.

Regarding claim 6, Vince (modified by AAPA and Hughes) as a whole teaches everything as claimed above, see claim 5. Vince is silent in regards to the method of claim 5 further comprising, prior to demuxing the high definition program stream, decrypting the encrypted high definition program stream.

However, Mercier teaches the processed content is input into the HDTV, where it may be decrypted and demultiplexed by a decrypter/demultiplexer device 1530 [0082] and fig. 15 element 1530).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Mercier with Vince (modified by AAPA and Hughes) to provided a system and method for protecting valuable content [0008].

Regarding claim 14, Vince (modified by ) as a whole teaches everything as claimed above, see claim 13. Vince is silent in regards to the apparatus of claim 13 further including a decrypted for decrypting the encrypted program data stream.

However, Mercier teaches a decrypter (fig. 15 element 1538).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Mercier with Vince (modified by) to provide a system and method for accessing encrypted valuable content.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vince et al., US-6,765,966 in view of Applicants Admitted Prior Art (AAPA) in view of Hughes et al., US-2001/0038746 A1 and further in view of Chen et al., A SINGLE CHIP MPEG-2 MP@ML AUDIO/VIDEO ENCODER /DECODER WITH A PROGRAMMABLE VIDEO INTERFACE UNIT.

8. Regarding claim 10, Vince (modified by AAPA and Hughes) as a whole teaches everything as claimed above, see claim 9. Vince is silent in regards to the method of

claim 9 wherein the generated standard definition resolution video stream comprised a blue screen video elementary stream.

However, Chen teaches blue screen generation (see section 4.1 Encoding).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Chen with Vince (modified by AAPA and Hughes) to provide a system that accommodates a variety of video pre-and post-processing algorithms, thumbnail processing/editing, and loopback, in a very efficient way.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA ROBERTS whose telephone number is (571)270-1821. The examiner can normally be reached on 7:30-5:00 EST Monday-Friday, Alt Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jessica Roberts/  
Examiner, Art Unit 2621

**/Tung Vo/  
Primary Examiner, Art Unit 2621**